REMARKS

Receipt of the Office Action of December 9, 2008 is gratefully acknowledged.

The examiner reminds applicant ..."of the proper language and format for an abstract.." Regarding the abstract of the present application, it was amended with the Preliminary Amendment filed in this case. As amended, it is believed to have the "proper language and format." Unless the examiner can point to some specific portion of the abstract that is considered to require correction, the abstract will remain as it is as a result of the preliminary amendment.

Claims 8 - 14 have been examined on their merits and rejected as follows: (1) claims 8, 9, 10 and 12 under 35 USC 102(b) by Najafi et al; (2) claim 11 under 35 USC 103(a) over Najafi et al; and (3) claims 13 and 14 under 35 USC 103(a) over Najafi et al in view of Baxter et al.

(1)

Considering first the Najafi et al reference. Najafi et al discloses a sensor package comprising a substrate 2 and a sensor chip 1. The sensor chip is mounted on the substrate by flip chip bonding, e.g. by using solder bumps or conductive polymers (cf. col. 6, l. 37-39). According to the Examiner (cf. Office Action p. 4) the underfill material 14 (e.g. in Fig. 2A) anticipates an "insulating organic layer" and the solder bump 5 (which could, according to col. 6, l. 37-39, be a bump made of a "conductive polymer" as well) anticipates a "conductive particle, grain or filament". Applicant cannot agree, since a solder bump is neither a particle, grain or filament.

While claim 8 is not believed to be anticipated by Najafi et al on the basis

not of functional differences but on the basis of structural differences, claim 8 has been amended to better define the invention by changing the identification of the "anisotropic conductor" to a "sealing element." That is, a sealing element, which is clamped between the support and the semiconductor chip and produces an electrically conducting connection between the chip and the support. The sealing element comprises an elastic insulating organic layer with a plurality of embedded, conductive grains or filaments (claims 9 and 10 have been cancelled and their subject matter included in claim 8 as amended).

The combination of the solder bump 5, which connects the sensor 1 and the substrate 2 and the surrounding underfill material 14 disclosed by Najafi et al is not, properly considered, a sealing element clamped between the substrate and the sensor. Rather, the solder bump connects electrically and mechanically the sensor to the substrate, wherein the underfill material encapsulates the bonding pads. In contrast to this, the sealing element of claim 8 comprises both a conducting component for electrically connecting the sensor chip to the support and an insulating elastic component for sealing the region outside the traversing opening of the support against contamination with the analyte, in one piece. This sealing element can simply be clamped between the support and the sensor chip in one single step, whereas the arrangement disclosed in the Najafi et al reference has to be produced in several steps (cf. col 6, l. 33-50). Thus, amended claim 8 is novel with respect to Najafi et al.

New independent claim 15 is also novel with respect to Najafi et al for the same reasons as noted for claim 8 as amended.

(2) & (3)

On page 7 of the Office Action, the Examiner argues, that it would have

been obvious to use a silicone layer with embedded gold filaments, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. However, Najafi et al just shows a sensing element which is connected to a support by flip chip bonding (e.g. Fig. 2A and col 6, l. 22-50), e.g. by use of solder bumps or a conductive polymer adhesive (col. 6, l. 33-34), wherein the bonding pads are encapsulated by an underfill material. One can agree, that it would be within general skill of a worker in the art to select an appropriate material for the flip chip bonding instead of a conductive polymer adhesive, or to select a suitable underfill material. However, applicant cannot see why the skilled person should replace the soldering or adhesive connection between the substrate and the sensor disclosed in the Najafi et al reference by a silicone layer with embedded gold filaments. The same applies to the other references of record which do not teach a silicone layer with embedded gold filaments. This is a structural distinction and not a functional distinction. Accordingly, applicant does not see where ***In re Leshin*** has any relevance .

In view of the foregoing, reconsideration and re-examination are respectfully requested and claims 9 and 11 - 17 are found to be allowable.

Respectfully submitted,
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